

APPARATUS AND METHOD FOR GLASS  
SEPARATION FOR FLAT PANEL DISPLAYS

ABSTRACT OF THE DISCLOSURE

5           A method and apparatus for separating glass panels that minimizes  
process failures and improves separation process consistency by utilizing a separation  
handle which applies the minimal pressure necessary to remove the edge portion from  
the glass panel. The glass panel is cut along the score line, which outlines the edge  
portions of the glass panel to be removed. The panel is placed upon the separating  
10       apparatus, which pumps nitrogen along the underside of the glass panel, causing the  
glass panel to float above the apparatus. Locating pins are inserted to position the  
panel on the stage. Once the glass panel is in place, a vacuum sucks the panel against  
the stage, holding the panel tightly against the stage. The separation handle is then  
inserted over the edge portion to be removed. A measured force is applied to the  
15       handle, with the force incrementally increased until the slow, controllable separation  
of the edge is achieved. This level of force is maintained until separation is complete.

00001368 101800